Weekly Project Report (COMP-10199)

Project Title	Project 14: Voice Agent for Candidate Onboarding & Career Guidance
Report Date	2026/01/30

Team Members (Full name)	
1- Dhairya Patel	2- Brendan Dileo
3- Jay Choksi	4- Rishyu Babariya

What was accomplished this week? (Please include details and avoid general terms)

- Submitted the full Project Proposal to the Project Owner.
- Held an internal team meeting on **Tuesday, January 27th,** to outline weekly tasks and finalize technical direction.
- Decided on the project tech stack: **Python backend** and **Python Streamlit frontend** for the dashboard interface.
- Conducted extensive research and comparisons on local models and paid cloud-based models for text generation (**LLM**), speech-to-text (**STT**), and text-to-speech (**TTS**), including cost, performance, and scalability.
- Evaluated multiple AI providers, including **OpenAI, Anthropic, DeepSeek, AssemblyAI, Google,** and **Ollama 3.1**.
- Investigated token pricing, model quality, and estimated monthly costs for each provider. Documented our findings into a structured **API Pricing Reference** document.
- Researched local model options and their hardware requirements, including:
  - F5-TTS (TTS)
  - LLaMa 3.1, Gemma 3 (3B & 4B), DeepSeek R1 (8B) (LLM)
  - OpenAI Whisper (STT)
  - Piper (STT)
- Performed initial test on both local and paid cloud models and documented pros/cons for performance, accuracy, and scalability.
- Designed a mockup of the candidate onboarding dashboard and drafted a logical voice interaction flow diagram.
- Started mapping backend integration requirements and how the frontend dashboard will interact with the voice agent.
- Uploaded system architecture diagrams and set up GitHub repository structure.
- Created a test account in Enabled Talent to consider what information is required.
- Met with the Project Owner on **Friday, January 30th,** to review the submitted proposal.
  - Discussed scope alignment, clarified expectations, and started to revise the proposal based on feedback related to time constraints and feasibility.

What was not completed as planned? Please explain why and state your plan to fix it.

- The **voice interaction flow diagram** was not fully completed earlier in the week.
  - **Reason:** We needed clarification from the Project Owner about what the voice agent should and should not do. After meeting with the Project Owner, we realized some of our initial assumptions were incorrect, and the diagram needed revisions. Initially, we thought the voice agent would need to have a correctional and confirmation process for error handling, but the client mentioned this was out of scope for the time being.
  - **Plan to Fix:** Now that the scope and responsibilities of the voice agent are clearer, we will finalize the updated interaction flow for next week.
- Our **initial frontend dashboard mockup** only focused on candidate onboarding.
  - **Reason:** After reviewing with the Project Owner, they clarified that the dashboard should function more like an auditing/debug dashboard rather than a simple onboarding form.
  - **Plan to Fix:** We will redesign the dashboard mockups to include tools for reviewing voice interactions, debugging candidate data capture, and monitoring system behaviour.

Team Member 1 Activities (Please include details and avoid general terms)

- Performed research on local and cloud-based paid AI models and APIs.
- Evaluated token pricing for multiple AI providers, including DeepGram, OpenAI, Google, Murf AI, ElevenLabs, AssemblyAI, HumAIO, and Gladia, and documented cost-per-token estimates.
- Analyzed which providers were the most suitable for the project based on multiple factors like performance, cost, efficiency, and integration complexity.
- Informed the team of findings to help the team understand differences between API models.
- Participated in internal team discussions to help determine the final tech stack and model selection approach.

Team Member 2 Activities (Please include details and avoid general terms)

- Conducted research comparing local AI models vs. cloud-based paid APIs for LLM, STT, and TTS components.
- Performed pricing research and created estimated cost calculations for cloud models based on projected token usage.
- Tested multiple cloud-based models, including OpenAI, Anthropic, DeepSeek, and Google, and documented accuracy and quality.
- Also tested local models such as Gemma 3 (3B & 4B) and DeepSeek R1 (8B) using Ollama and custom Python scripts to evaluate feasibility for local deployment options.
- Created a comprehensive API Voice Model Reference document, summarizing pricing, model capabilities, and performance considerations.
- Consolidated test results and shared key findings with the group to support model selection.
- Created high-level and detailed system architecture diagrams and an initial voice interaction flow diagram.

Team Member 3 Activities (Please include details and avoid general terms)

- Set up the full GitHub repository, including adding all team members and assigning admin access to both the client and instructor.
- Established a clean repository structure with folders such as /docs, /src, /logs, and /tests to ensure consistent project organization.
- Uploaded the architecture diagrams to the /docs directory and linked all documentation within the main README for easy navigation.
- Documented the rationale behind the chosen tech stack, including backend, frontend, and deployment considerations.
- Created a test account for Enabled Talents, explored the available mock candidate data, and documented the workflow for accessing and using this test data.

Team Member 4 Activities (Please write down details and avoid general terms)

- Conducted UI/UX research on effective form structure, accessibility guidelines, and user-friendly data collection design.
  - Looked into general data collection design and referenced the Enabled Talent website.
- Designed the initial mockup for the candidate onboarding form interface, prioritizing clarity, usability, and a clean layout.
- Met with the Project Owner to review the proposed interface and discuss the required candidate information fields.
- Started adjusting mockup based on client feedback to ensure the form aligned with project requirements.
- Helped redefine the direction of the dashboard by clarifying which data points the system must capture during voice-based onboarding.

Did you have meeting with your Project Owner? If yes, write details of meeting and its outcome

Yes, we met with the Project Owner on Friday, January 30th.

During the meeting, we reviewed the Project Proposal, focusing especially on the scope and expectations of the system. Key outcomes include:

- Confirmed which functionalities the voice agent should include and clarified what features should not be part of the project.
- Discussed preferences regarding AI models. The Project Owner indicated that model choice was up to our team, but noted that local models would be easier unless we were willing to pay for cloud APIs.
  - Their goal is to have a simple plug-and-play deployment setup.
- Specified that the backend should provide a REST API for interacting with the voice agent.
- Clarified what fields the voice agent must collect, focusing on basic resume information, not full candidate profiling.
- Provided feedback on our dashboard direction and confirmed that the frontend should function as an auditing/debugging dashboard instead of just an onboarding form.
- Reviewed repository setup and expectations and confirmed access permissions and documentation structure.
- Helped us refine our understanding of the required deliverables and timelines.

The meeting resulted in updated scope definitions, adjustments to mockups, and a clearer plan for the architecture moving forward.

For major GitHub commits during the week, specify the Commit Title and its reason

- *Update architecture diagrams with 'coming soon' note*
  - Reason: Updated documentation diagrams to reflect upcoming components that are not yet implemented. Ensures clarity for both our group and the Project Owner.

Is there any other information you want to reflect about your project (optional)

- The group is now fully aligned with the clarified scope and expectations after meeting with the Project Owner.
- Early research on both local and cloud AI solutions has helped narrow down feasible options and unnecessary development paths.
- Setting up the GitHub repository early has improved organization and ensures smooth collaboration moving forward.
- Initial mockups and diagrams have helped guide discussions and development plans.
- The feedback from the Project Owner significantly improved our understanding of deliverables over the initial meeting.

If you have any screenshot, artifact, etc. that can illustrate your week's progress, please include it here (Optional)
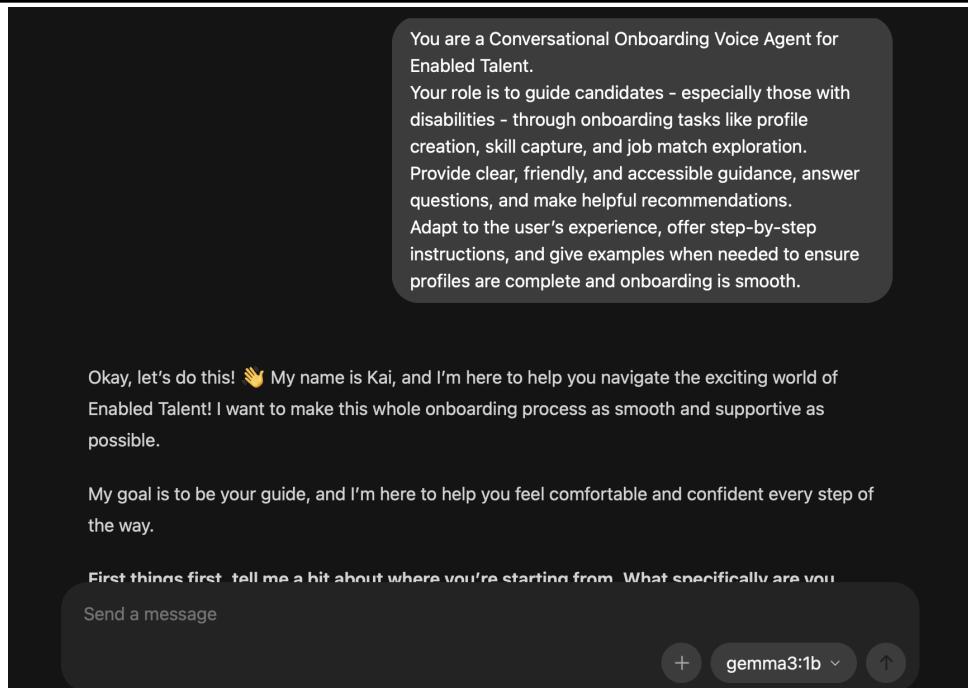
Voice Assistant API Pricing Reference

January 20, 2026
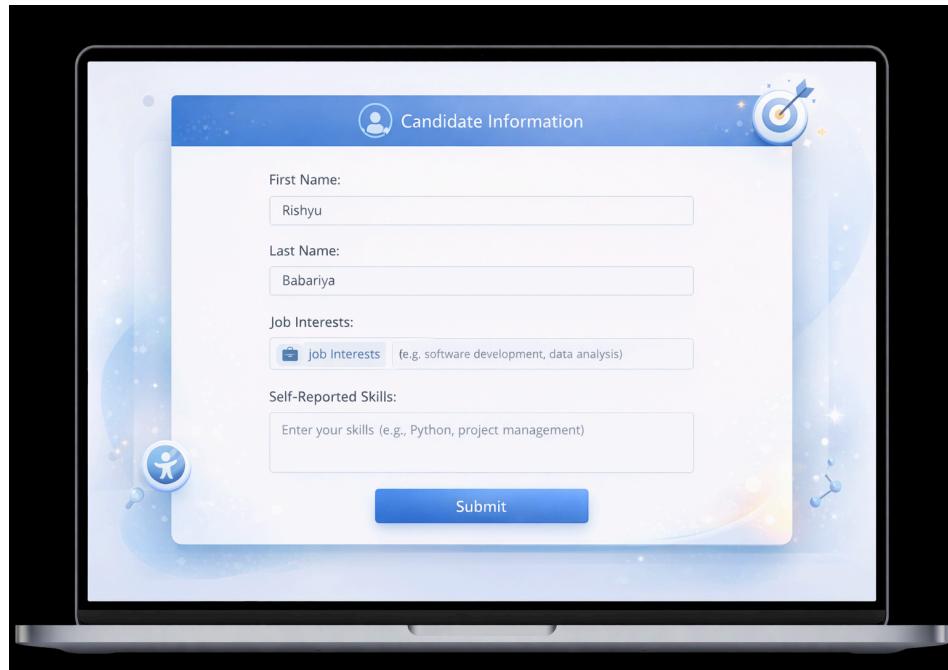
Complete Pricing Comparison

SPEECH-TO-TEXT (STT)

Provider	Model/Tier	Price	vs Whisper	Best For
OpenAI	Whisper-1	**$0.006/min**	Baseline	General use, 99+ languages
AssemblyAI	Universal	**$0.0045/min**	25% cheaper	Budget-conscious, good accuracy
Deepgram	Nova-3 (PAYG)	**$0.0077/min**	28% more	Real-time streaming
Google Cloud	Standard	**$0.016/min**	2.7x more	Enterprise, integration
Azure	Real-time	**$0.0167/min**	2.8x more	Enterprise, Microsoft ecosystem
Azure	Batch	**$0.006/min**	Same	Non-real-time processing

Image One: *Voice Assistant API Pricing Reference*
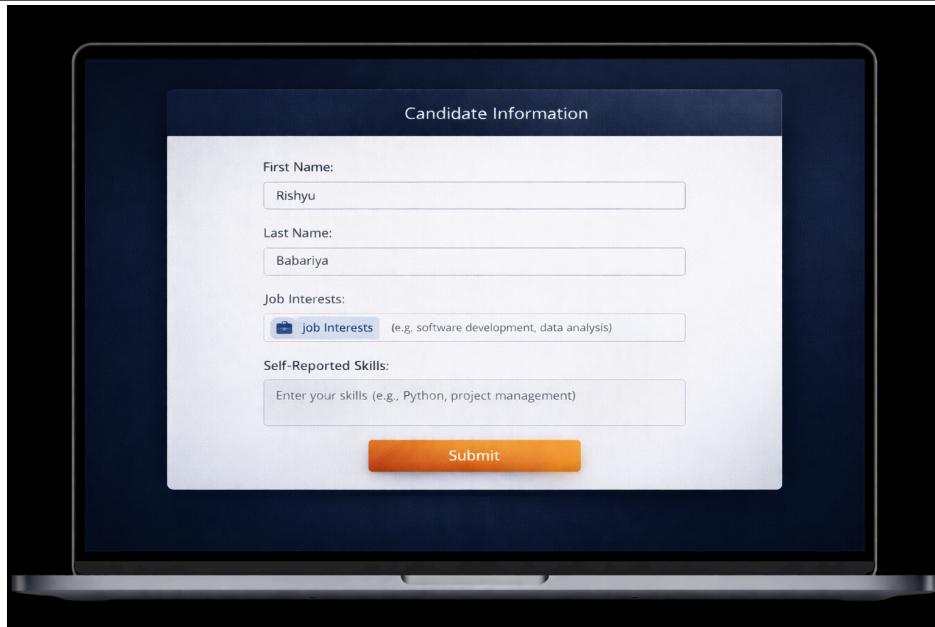
Image Two: *Experimenting with Gemma 3 (1B) Local Model*

Image Three: *Initial Mockup Design (Pre-Meeting)*

Image Four: *Improved Design (Pre-Meeting)*